



Director of Safety

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- NER Safety
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- National Safety Pages
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CIVIL AIR PATROL - NORTHEAST REGION UNITED STATES AIR FORCE AUXILIARY

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May

Newsletter Date

05-02-2010

May Is National Electrical Safety Month

Electrical fires in our homes claim the lives of **485** Americans each year and injure **2,305** more. Some of these fires are caused by electrical system failures and appliance defects, but many more are caused by the misuse and poor maintenance of electrical appliances, incorrectly installed wiring, and overloaded circuits and extension cords.

THE CAUSE

Electrical Wiring

- Most electrical fires result from problems with "fixed wiring" such as faulty electrical outlets and old wiring. Problems with cords and plugs, such as extension and appliance cords, also cause many home electrical fires.
- In urban areas, faulty wiring accounts for 33% of residential electrical fires.
- Many avoidable electrical fires can be traced to misuse of electric cords, such as overloading circuits, poor maintenance and running the cords under rugs or in high traffic areas.

Home Appliances

- The home appliances most often involved in electrical fires are electric stoves and ovens, dryers, central heating units, televisions, radios and record players.

Safety Precautions

- Routinely check your electrical appliances and wiring.
- Frayed wires can cause fires. Replace all worn, old or damaged appliance cords immediately.

- Use electrical extension cords wisely and don't overload them.
- Keep electrical appliances away from wet floors and counters; pay special care to electrical appliances in the bathroom and kitchen.
- When buying electrical appliances look for products that are evaluated by a nationally recognized laboratory, such as Underwriters Laboratories (UL).
- Don't allow children to play with or around electrical appliances like space heaters, irons and hair dryers.
- Keep clothes, curtains and other potentially combustible items at least three feet from all heaters.
- If an appliance has a three-prong plug, use it only in a three-slot outlet. Never force it to fit into a two-slot outlet or extension cord.
- Never overload extension cords or wall sockets. Immediately shut off, then professionally replace, light switches that are hot to the touch and lights that flicker. Use safety closures to "child-proof" electrical outlets.
- Check your electrical tools regularly for signs of wear. If the cords are frayed or cracked, replace them. Replace any tool if it causes even small electrical shocks, overheats, shorts out or gives off smoke or sparks.

Finally, having a working smoke alarm dramatically increases your chances of surviving a fire. And remember to practice a home escape plan frequently with your family.

Safety Officer Quarterly Meetings

Quarterly meetings with all Region Wing Safety Officer will be conducted quarterly. These meetings will be in the form of a teleconference.

This month Delayed Due to unforeseen problems. Meeting will be re-scheduled soon.

Content of these meetings will be a short safety brief, Information on the Status of the Region and National and an open forum.

Notice of the date and times will be sent out in advance to the NER Safety email list.

Dates will be posted on the NER Safety Website and notices will be sent out.

Anyone interested in attending these meetings are welcome.

NER Quarterly Safety Report

This report is to be used by all Wing level Safety Officers to report Quarterly Compliance to the Region

NER Staff Safety Meeting Form

This report is for all Region Staff Members to report there monthly Safety Meeting Compliance. This is Mandatory for all Staff Members of NER.

<http://nerse.nhplm.org>



HYPOXIA

The Higher You Fly... The Less Air In The Sky

Breathing is one of the most automatic things we do — over 20,000 times a day. Each breath does two things for our body. It expels carbon dioxide when we exhale, and takes in oxygen when we inhale. It's a delicate balance.

Exercise or stress increases the production of carbon dioxide, so we breathe faster to eliminate it and take in more oxygen at a greater rate. Because of the effects of gravity, the amount of air containing oxygen is greater at sea level. For example, the pressure at sea level is twice that found at 18,000 feet MSL.

Although the percentage of oxygen contained in air at 18,000 feet is identical to that at sea level (a little over 20%), the amount of air our lungs take in with each breath contains half the oxygen found at sea level. Breathing faster or more deeply doesn't help. In fact, because you're consciously over-riding a system that is normally automatic, you'll be compounding the problem by exhaling too much carbon dioxide.

Supplemental oxygen

The solution is simple, familiar to most pilots, and required by FAR 91.211: supplemental oxygen. This regulation specifies a 30-minute limit before oxygen is required on flights between 12,500 and 14,000 feet MSL, and immediately upon exposure to cabin pressures above 14,000 feet MSL. For best protection, you are encouraged to use supplemental oxygen above 10,000 feet MSL.

At night, because vision is particularly sensitive to diminished oxygen, a prudent rule is to use supplemental oxygen when flying above 6,000 feet MSL.

So, when you fly at high altitudes, supplemental oxygen is the *only* solution. That's because supplemental oxygen satisfies the twin demands of having enough oxygen to meet your body's demands and a breathing rate that excretes the right amount of carbon dioxide.

Hypoxia

Unfortunately, our body doesn't give us reliable signals at the onset of hypoxia— oxygen starvation — unless we have received special training to recognize the symptoms. In fact, it's quite the contrary. The brain is the first part of the body to reflect a diminished oxygen supply, and the evidence of that is usually a loss of judgment.

Hypoxia tests

Altitude chamber tests, in which high altitude flight conditions are duplicated, have shown that some people in an oxygen deficient environment actually experience a sense of euphoria — a feeling of increased well-being. These subjects can't write their name intelligibly, or even sort a deck of cards by suits...yet, they think they're doing just fine!



The higher you go

Bear in mind, the progressive reduction of oxygen per breath will continue the higher you go. Flying above a layer of clouds that doesn't look too high, or flying in the mountains on a clear day — are the very environments that have

caused many good "flat-land" pilots to get into trouble.

Symptoms

Everyone's response to hypoxia varies. Unless, as we've stated, you've had special training to recognize its symptoms, hypoxia doesn't give you much warning. It steals up on you, giving your body subtle clues. The order of symptoms varies among individuals: increased breathing rate, headache, lightheadedness, dizziness, tingling or warm sensations, sweating, poor coordination, impaired judgment, tunnel vision, and euphoria. Unless detected early and dealt with, hypoxia can be a real killer.

Caution and safety

So, don't decide you'll try to fly over that range of mountains, thinking you'll turn back if you start to feel badly. You may feel great...until it's too late! Use supplemental oxygen.

Briefly...

- ☐ When you breathe, you inhale oxygen and exhale carbon dioxide.
- ☐ With each normal breath, you inhale about one-half liter of air, 20% of which is oxygen.
- ☐ At 18,000' MSL, you have **half** the sea level air pressure; hence, only **half** the oxygen.
- ☐ Oxygen starvation first affects the brain; judgment is impaired, so you may not know you are in trouble.
- ☐ We all react differently to the effects of hypoxia. Only physiological training can safely "break the code" for you.

REMINDER—Guidelines for Submitting the On-line CAP Form 78

We are still seeing too much information being submitted on the Form 78. Remember when entering data and reporting using the on-line form 78 Too often the reporting member enters long drawn out excuses for the incident and far too much irrelevant information.

Remember the details of the incident are the job of the investigator.

For example if you are reporting that a cadet fell while attending an event, simply put: "Cadet fell

and cut knee. First aid administered and cadet sent home with parent." The names, the event and location are other entries on the form. Also, please check your spelling and grammar before clicking the "submit" button.

Another example, which was submitted sounded more like a lengthy taxi clearance across ORD that ended with the statement that one of the aircraft's main tires went flat while taxiing.

In this case the report should simply have stated: "While taxiing N123CP at XXX the left main tire deflated. There were no injuries."





Summer is coming Think Density Altitude



Hot, high and humid weather conditions can change a routine takeoff or landing into an accident in less time than it takes to tell about it.

Density altitude effects are not confined to mountain areas. They also apply at elevations near sea level when temperatures go above standard. (59 F or 15 C) From the pilot's point of view, an increase in density altitude results in:

1. Increased takeoff distance.
2. Reduced rate of climb.
3. Increased true airspeed on approach and Idg (same IAS).
4. Increased landing roll distance.

To calculate Density Altitude refer to your Aircraft Pilot's Operating Handbook or ask your FSDO for the P-Pamphlet entitled "Density Altitude" (FAA-P-8740-2) Logging of Pilot-In-Command Tim

Don't forget to take care of the most important part of the aircraft- the pilot.

Bring some water along on trips to avoid dehydration.

Summer brings great opportunities for a GA aircraft with trips for vacation travel to just plain "fun flying."

Keep summer's special risks in mind when flying stay cool and enjoy the great weather!



Look Out!

Avoid Midair Collisions

Studies of the midair collision problems form certain definite warning patterns. It may be surprising to some that nearly all midair collisions occur during daylight hours and in VFR conditions. Perhaps not so surprising is that the majority happen within five miles of an airport, in the areas of greatest traffic concentration, and usually on warm weekend afternoons when more pilots are doing more flying.

Also surprising is the fact that the closing speed is relatively slow, usually much slower than the airspeed of either aircraft involved. This is because the majority of in-flight collisions are the result of a faster aircraft overtaking and hitting a slower plane.

The cause of a midair collision is most often noted as: "Failure of pilot to see the other aircraft". So remember to Look Out!

Safety Issues in Today's Meeting places and Offices

Safety issues are an important topic in all that we do in CAP and in our personal Lives. Accidents may often be small, but they can also lead to life-altering results such as mutilation and even death. The most common type of safety issues in our meeting places and offices relates to tripping and falling, however, there are many other causes to be considered. CAP has an superior policy for dealing with safety issues and we should also be considering topics such as ergonomics and the arrangement of the space so that the tasks best fit the people who complete them.

Falls

- ☐ In Storage areas Anything above shoulder level should be retrieved with the use of a step stool or ladder.
- ☐ Step stools and ladders should only be used if they are in good condition without any broken rungs or legs and without being wobbly.
- ☐ Chairs should always be used flat on the floor and not leaning back. Chairs with a "leaning" feature shouldn't be pushed beyond their limit which may result in over-balancing.
- ☐ Chairs and boxes should never replace ladders or step stools
- ☐ Pathways should be kept clear
- ☐ Electrical cords and wires must be kept out of pathways
- Electrical cords must be UL Rated and do not over use receptacles and cords.
- ☐ When seated, excessive twisting, leaning back, and bending over should be avoided.

Filing Cabinets and Bookshelves

- ☐ When filling drawers or shelves, always fill from the bottom, up, allowing the weight to keep it from tipping over
- ☐ When finished with drawers or doors, make sure to close them properly to prevent bumps and tripping. Open only one drawer or door at a time.
- ☐ Filing cabinets should be placed in low-traffic areas.
- ☐ Any cabinets or bookcases over sixty four inches high should be secured to the wall to prevent tipping.

General Safety Issue Practices

Guard or tape any furniture corners or edges that are sharp. Any "pull out" keyboard or writing drawers should be pushed back in when not being used.

- ☐ Keep the environment clean. Throw away trash and empty the cans often, and keep floors free of obstacles and unnecessary items.
- ☐ Spills should be cleaned immediately to avoid slips.
- ☐ Immediately report any defects in the area such as loose tiles, broken railings, broken doors, broken steps etc.
- ☐ Keep sharp objects such as scissors, tacks, and razor blades in closed containers.
- ☐ Air vents and air registered should be kept unobstructed.
- ☐ Furniture, equipment, or other materials should not be positioned in a way that they obstruct air movement or thermostats.
- ☐ Any pest control related problems should be reported immediately.
- ☐ Pest control chemicals should be used only by experts.
- ☐ Ensure all Exits are well marked and clear of any obstructions
- ☐ Ensure all Smoke detectors are functioning properly
- ☐ Ensure all Fire Extinguisher locations are well marked and extinguishers are in compliance.

The most important way to prevent safety issues is to use common sense at all times.

POISON IVY MYTHS AND FACTS

Leaves of Three, Let It Be

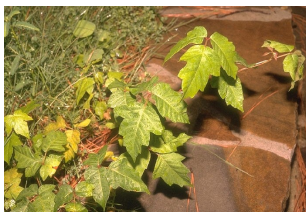


It is spring and Summer is fast approaching. With the good weather ahead of us we will be venturing outside and out of our urban environments. With this in mind most of us must be concerned with poisonous plants and the effects they can have on us. Millions of people get rashes from poison ivy, poison oak, and poison sumac plants each year. That has created millions of people with questions about poison

ivy and many people who believe that they are 'poison ivy experts' and think that they know everything about poison ivy.

Poison Ivy Fact

Poison ivy is a member of the Rhus or Toxicodendron genus of plants, which also includes poison oak and poison sumac. Poison ivy is usually found growing as a vine or shrub east of the Rocky Mountains along trails, ponds, and lakes. Viewing pictures of poison ivy can help you to identify it better.



Poison sumac grows in boggy areas in the southern United States, while poison oak grows as a bush or climbing vine in the western United States, west of the Rocky Mountains. Each plant can also grow in other forms in other parts of the country.

Poison Ivy Myth/Fact

Are some people so sensitive to poison ivy that they can get a rash even if they are standing near a poison ivy plant? This is mostly a myth. You do have to touch a plant or come into contact with the urushiol oil in another way, such as if the oil is someone's clothing, fingernails, or a pet, and you touch the contaminated area.

You could also have a reaction to poison ivy if someone is burning a poison ivy plant or leaves and you inhale or have contact with the smoke. In fact, this can cause a serious reaction and is a good reason why you should never burn poison ivy

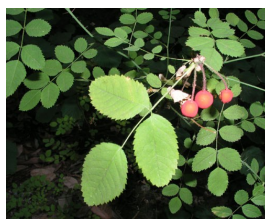
Poison Ivy Myth

Is poison ivy contagious? Many people think it is, and it is easy to see why, since the rash you get from poison ivy looks as if it should be contagious. But this is one of the biggest myths that is spread about poison ivy. Poison ivy rashes are not contagious. The fluid from blisters and the rash can not spread the rash.

The reason that the classic poison ivy rash seems to spread is that different areas of a person's body typically have different levels of exposure to the urushiol of poison ivy that causes the rash. The rash can also seem to spread if you are re-exposed or if you are exposed to clothing or other inanimate objects that were contaminated and had contact with the poison ivy plants.



Picture of Poison Ivy Rash



<< Poison Oak

Poison Ivy Fact

Urushiol is the chemical in poison ivy plants that causes the typical allergic reaction and symptoms of poison ivy rashes. Although it can sometimes be washed off within 10 minutes, after that, it is very likely to cause a reaction within 8 to 48 hours. Urushiol is found in the leaves, stems, and roots

of poison ivy plants, which means that you can get a rash even in the winter, when a plant has lost all of its leaves.



Poison Ivy Myth/Fact

Are some people immune to poison ivy? It is true that some people don't have an allergic reaction when they are exposed to poison ivy, but others don't have their first reaction until they are exposed multiple times. So it is very hard to truly know if you are really immune. It may just be that you just haven't had your first reaction yet, so even if you think that you are immune, you should still try to take steps to avoid poison ivy.

Keep in mind that most experts believe that 50 to 80% of people will develop a rash after exposure to poison ivy.

Poison Ivy Myth/Fact

Are infants and babies immune to poison ivy? It is true that Pediatricians rarely see poison ivy reactions in younger children, but part of the reason for that is that they are less likely to be exposed than older children who are more likely to play and explore in areas where poison ivy grows. Many experts do also believe that younger children are less susceptible to poison ivy. In fact, the peak age for becoming sensitive to poison ivy is not thought to occur until a child is between the ages of 8 and 14 years old.

Poison Ivy Fact

Being sensitive to poison ivy is genetic. Since having a reaction to poison ivy is thought to run in the family, if a child's parents are sensitive to poison ivy, it might be a good idea to be extra careful to avoid poison ivy in their children starting at a very early age.

Poison Ivy Myth

It is a myth that poison ivy only grows along trails or in the woods. In fact, in some parts of the country, it seems like it grows just about everywhere, even in well maintained gardens and flower beds. If you get an itchy rash after working out in your garden, think poison ivy and be on the look out for it.

Poison Ivy Fact

You can grow out of your sensitivity to poison ivy. Many people do seem to have less severe reactions as they get older, especially if they have less frequent exposures as adults.

References

Habib: Clinical Dermatology





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Professional Development Note

**NER Staff College
Registrations are now
open**

[http://
nersc.nhplm.org](http://nersc.nhplm.org)



Remember—Remember –Remember

We take Safety very seriously and Safety is an everyday thing that needs to be included in everything that we do. Safety can not be neglected or bypassed just because it is more convenient to do so.

BE SAFE

SafeTips Be an SAFE Griller

Whether you use a propane or natural gas barbecue, keep safety in mind. Before starting the unit, check all the connections to make sure they are tight. Then, check for leaks by applying a mixture of soap and water to the hoses and gas cylinder head — growing bubbles indicate a leak.

And before lighting the grill, remember to open the lid so gas can't build up underneath it. Never hold a match or cigarette lighter over the grill: the quick ignition is sure to cause serious burns. Never barbecue in an enclosed space and keep children away from a hot grill.



SafeTips

Prom Safety Checklist:

PROM Night WOW this is a once in a life time experience and should be enjoyed.

For many parents the biggest concern isn't the cost of attending prom, but worry about the risky behaviors associated with proms

- Who will be doing the driving? Will they drive themselves or rent a limo?
- If driving themselves, keep a list of names and phone numbers of each teen rider, along with names and addresses of all the parents. Insist that the car radio be kept at a low volume, limit the number of teen passengers to minimize distractions for the driver, and require each teen to buckle up his or her seatbelt.
- Get a complete itinerary, including who your teen will be partying with, addresses and phone numbers for the prom location as well as any after-parties your teen plans to attend.
- If your teen will be renting a limo, be sure to check the limo company's driving record, and don't be afraid to ask the company to provide it to you.
- Does your teen know how to contact you throughout the evening? Consider arranging specific check-in times, and make sure you can contact your teen throughout the entire night.
- Communicate with your teen specifically about how she would handle difficult situations such as being offered a ride by an intoxicated driver, being offered alcohol or drugs, or pressure to have sex. Be sure to provide parental instruction on how best to deal with problems that may arise.

Find out who will be supervising the prom and after-parties. Be sure to speak directly with any parents supervising after-parties your teen wishes to attend, since some parents may allow underage drinking, and may not have the same set of morals and values that you do.

Play it SAFE and Have a Great Time

Flight Standards District Offices (FSDO)

http://www.faa.gov/about/office_org/field_offices/fsdo/